



DFW

In re Patent Application of) **MAIL STOP**
Ming Bo Wang et al.)
Application No.: 10/780,638) Group Art Unit: 1638
Filing Date: February 19, 2004) Examiner: Kathy Kingdon Worley
Title: EFFICIENT GENE SILENCING IN) Confirmation No.: 2125
PLANTS USING SHORT DSRNA)
SEQUENCES)

REPLY TO RESTRICTION REQUIREMENT TRANSMITTAL LETTER

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Enclosed is a reply for the above-identified patent application.

- ☐ A Petition for Extension of Time is enclosed.
- ☐ _____ Terminal Disclaimer(s) and the ☐ \$ 65 ☐ \$ 130 fee per Disclaimer due under 37 C.F.R. § 1.20(d) are enclosed.
- ☐ Also enclosed is/are: _____
- ☐ Small entity status is hereby claimed.
- ☐ Applicant(s) requests continued examination under 37 C.F.R. § 1.114 and enclose the ☐ \$ 395 ☐ \$ 790 fee due under 37 C.F.R. § 1.17(e).
- ☐ Applicant(s) requests that any previously unentered after final amendments not be entered. Continued examination is requested based on the enclosed documents identified above.
- ☐ Applicant(s) previously submitted _____ on _____ for which continued examination is requested.
- ☐ Applicant(s) requests suspension of action by the Office until at least _____, which does not exceed three months from the filing of this RCE, in accordance with 37 C.F.R. § 1.103(c). The required fee under 37 C.F.R. § 1.17(i) is enclosed.
- ☐ A Request for Entry and Consideration of Submission under 37 C.F.R. § 1.129(a) (1809/2809) is also enclosed.

- ☒ No additional claim fee is required.
- ☐ An additional claim fee is required, and is calculated as shown below:

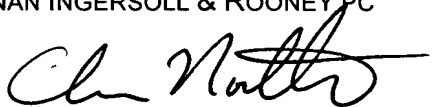
AMENDED CLAIMS					
	No. of Claims	Highest No. of Claims Previously Paid For	Extra Claims	Rate	Additional Fee
Total Claims	12	20	0	x \$ 50 (1202)	\$ 0
Independent Claims	1	3	0	x \$ 200 (1201)	0
<input type="checkbox"/> If Amendment adds multiple dependent claims, add \$ 360 (1203)					\$ 0
Total Claim Amendment Fee					\$ 0
<input type="checkbox"/> Small Entity Status claimed - subtract 50% of Total Claim Amendment Fee					0
TOTAL ADDITIONAL CLAIM FEE DUE FOR THIS AMENDMENT					\$ 0

- ☐ Charge _____ to Deposit Account No. 02-4800 for the fee due.
- ☐ A check in the amount of _____ is enclosed for the fee due.
- ☐ Charge _____ to credit card for the fee due. Form PTO-2038 is attached.
- ☒ The Director is hereby authorized to charge any appropriate fees under 37 C.F.R. §§ 1.16, 1.17 and 1.20(d) and 1.21 that may be required by this paper, and to credit any overpayment, to Deposit Account No. 02-4800. This paper is submitted in duplicate.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date August 9, 2006

By: 
Christopher L. North
Registration No. 50433

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Patent
Attorney's Docket No. 1021565-000156

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of)	
Ming Bo WANG et al.)	Group Art Unit: 1638
Application No.: 10/780,638)	Examiner: Cathy Kingdon Worley
Filed: February 19, 2004)	Confirmation No.: 2125
For: EFFICIENT GENE SILENCING IN)	
PLANTS USING SHORT dsRNA)	
SEQUENCES)	

REPLY TO RESTRICTION REQUIREMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In complete response to the Office Action mailed July 11, 2006 setting forth a restriction requirement , applicants make the following election with traverse.

Election with traverse

The inventions among which the Office has required restriction are set forth on page 2 of the Office Action. Groups I-VIII comprise claim 3, directed to a method of reducing the expression of a gene in a plant cell using a chimeric gene comprising a subsequence of a designated sequence, wherein the designated sequence in the chimeric gene is one of SEQ ID NO: 1-8, respectively. Groups I-VIII are linked by claims 1-2 and 4-9. Group IX comprises claims 10-12, directed to a chimeric gene and a plant or plant cell comprising the chimeric gene.

The Restriction Requirement is respectfully traversed. The Examiner has asserted that the products of Group IX can be used in materially different processes than the processes of

Groups I to VIII. The Examiner suggests as an example in support of this assertion that the chimeric gene could be used as a hybridization probe to screen a cDNA library.

Applicant respectfully submit that the Examiner's asserted reason represents the sort of hypertechnical application of restriction practice that the requirement of a serious burden in Manual of Patent Examination Procedure § 803 was intended to avoid. The sequences of SEQ ID NOS:1-8 represent only features of the inventions of Groups I to VIII among all the recited elements. The necessary search for all the elements of any of inventions of Groups I to VIII would substantially overlap with a search for all the elements of Group IX. As a result, extending the search to cover all the claims would represent a relatively small incremental additional burden. Therefore, the requirement is improper for lack of a serious burden.

Furthermore, as required by Manual of Patent Examination Procedure § 806.05(e) when restricting between a process and an apparatus for its practice "the burden is on the examiner to provide reasonable examples that recite material differences." The use of a chimeric gene characterized by having a promoter recognized by RNA polymerase III of the type III and an sense and antisense nucleotide sequence of any gene of interest capable of forming a dsRNA molecule, and further a region specifically involved in terminating transcription by a RNA polymerase III, while possible, would be a rather illogical choice as hybridization probe to screen a cDNA library.

The example use cited by the Examiner is merely a general use for nucleic acids and not a specific use of the claimed products. The example cited by the Examiner in support of the restriction requirement does not take into account the specific features of the products of Group IX. As another example, in principle, the chimeric genes of Group IX could also be hydrolyzed and used as a source of individual nucleic acids. However, such general use,

applicable to any nucleic acid, would bear no specific relationship to the distinct features of the products of Group IX and accordingly would not be a reasonable basis for restriction. It is clear that the products of Group IX are particularly adapted for use in the methods of Groups I-VIII. Therefore, no meaningful basis for the restriction can be stated.

Applicants hereby elect with traverse, the invention of Group IX directed to a chimeric gene and a plant cell and plant comprising said chimeric gene. However, for at least the foregoing reasons, rejoinder of Group IX with the claims that link Groups I to VIII and thereby rejoinder of Groups I to VIII with Group IX, and examination of all the claims is proper and is respectfully requested. It is noted that the methods of Groups I to VIII recite all the features of the products of Group IX. Therefore, at the very least, in the event that claims in Group IX are found allowable, then rejoinder of the method claims reciting all the features of allowed claims will be requested.

In the event that there are any questions relating to this Reply to Restriction Requirement, or the application in general, it would be appreciated if the Examiner would contact the undersigned attorney concerning such questions so that prosecution of this application may be expedited.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: August 9, 2006

By:



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